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2005:15686 CAPLUS
AN
DN
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     Entered STN: 07 Jan 2005
ΤI
     Perylenetetracarboxylic acid dibenzimidazole sulfoderivatives containing
     oxo-groups in the perylene core which form part of a para-quinoid system
     of bonds, lyotropic liquid crystal systems and anisotropic films
     containing the same, and methods for making the same
IN
     Sidorenko, Elena N.; Nazarov, Victor V.
PΑ
SO
     U.S. Pat. Appl. Publ., 28 pp.
     CODEN: USXXCO
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     75-11 (Crystallography and Liquid Crystals)
     Section cross-reference(s): 28, 73, 74
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AΒ
     Anisotropic films are based on sulfoderivatives of perylenetetracarboxylic
     acid dibenzimidazole (PTCA DBI) which contain oxo groups pendant to a
     perylene core. The oxo-groups, in combination with portions of the
     perylene core, form a quinoid system of bonds. The oxo substituted PTCA
     DBI sulfoderivatives form liquid crystal systems possessing high optical
     properties. The liquid crystal systems can be applied onto various
     substrates to obtain optically isotropic or anisotropic, at least
     partially crystalline, films applicable in various fields.
ST
     perylenetetracarboxylate dibenzimidazole sulfo deriv lyotropic liq
     crystal; optically anisotropic film perylenetetracarboxylate
     dibenzimidazole sulfoderiv lyotropic liq crystal
IT
     Liquid crystals
        (lyotropic; preparation of perylenetetracarboxylic acid dibenzimidazole
       sulfoderivatives and lyotropic liquid crystal systems based on them and
       optically anisotropic films formed from them)
IT
     Optical films
     Polarizing films
        (preparation of perylenetetracarboxylic acid dibenzimidazole
       sulfoderivatives and lyotropic liquid crystal systems based on them and
       optically anisotropic films formed from them)
IT
    Optical instruments
        (retarders; preparation of perylenetetracarboxylic acid dibenzimidazole
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sulfoderivatives and lyotropic liquid crystal systems based on them and
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     81-30-1D, reaction product with diaminobenzenesulfonic acid
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                                               634615-88-6
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     RL: NUU (Other use, unclassified); USES (Uses)
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        (preparation and oxidation and sulfonation of)
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        sulfoderivatives and lyotropic liquid crystal systems based on them and
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     95-54-5, o-Phenylenediamine, reactions
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     RL: RCT (Reactant); RACT (Reactant or reagent)
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     d'e'f']diisoquinoline-2,13-disulfonic acid, 10,21-dihydro-7-hydroxy-10,21-
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IT 784179-96-0P 784179-97-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and oxidation of)

RN 784179-96-0 CAPLUS

CN Bisbenzimidazo[2,1-a:2',1'-a']anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-2,13-disulfonic acid, 10,21-dihydro-7,18-dihydroxy-10,21-dioxo-(9CI) (CA INDEX NAME)

RN 784179-97-1 CAPLUS

CN Bisbenzimidazo[2,1-a:1',2'-b']anthra[2,1,9-def:6,5,10-d'e'f']diisoquinoline-3,14-disulfonic acid, 6,11-dihydro-8,19-dihydroxy-6,11-dioxo-(9CI) (CA INDEX NAME)

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RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and sulfonation of)

784179-98-2 CAPLUS RN

Bisbenzimidazo[2,1-a:2',1'-a']furo[2',3',4',5':4,5]phenanthro[2,1,10-def:7,8,9-d'e'f']diisoquinoline-3,13-disulfonic acid, 6,10-dihydro-6,10-dioxo- (9CI) (CA INDEX NAME) CN

## IT 784179-90-4P 784179-91-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and sulfonation and oxidation of)

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## IT 784179-94-8P 784179-95-9P

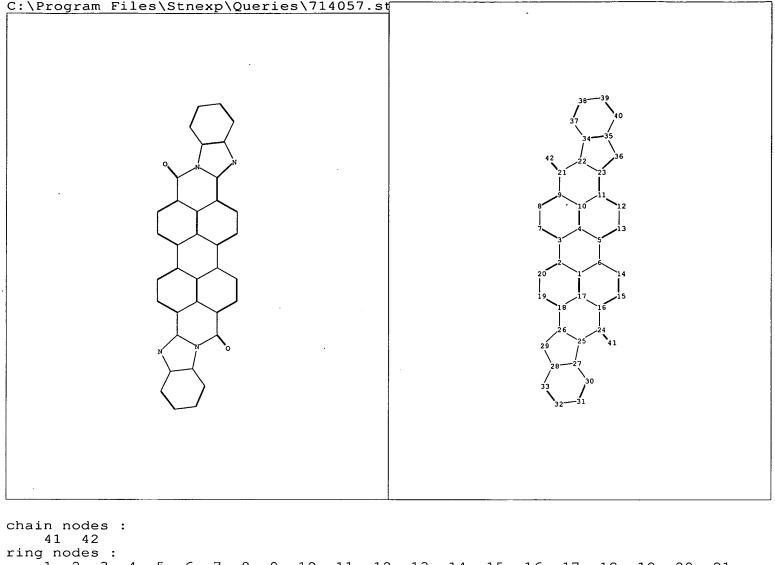
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     Perylenetetracarboxylic acid dibenzimidazole sulfoderivatives
     containing oxo-groups in the perylene core which form part of a
     para-quinoid system of bonds, lyotropic liquid crystal systems and
     anisotropic films containing the same, and methods for making the same
IN
     Sidorenko, Elena N.; Nazarov, Victor V.
PA
     U.S. Pat. Appl. Publ., 28 pp.
SO
     CODEN: USXXCO
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     Nazarov, Victor V.; Sidorenko, Elena N.
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     Russia
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     U.S. Pat. Appl. Publ., 26 pp.
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      Anisotropic films based on 1,8-naphthoylene-1',2'-benzimidazole sulfonates
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ΤI
     Sulfoderivatives of indanthrone, lyotropic liquid crystal system
     and anisotropic film on their base
IN
     Nazarov, Victor V.; Sidorenko, Elena N.
PA
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SO
     U.S. Pat. Appl. Publ., 14 pp.
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ΤI
     Anisotropic films based on sulfoderivatives of
     phenanthro-9',10':2,3-quinoxaline and lyotropic liquid crystal systems and
     method for making
     Sidorenko, Elena N.; Dutova, Tatiana Ya.
IN
PΑ
     Optiva, Inc., USA
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     U.S., 12 pp.
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             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
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             PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,
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